

Applicant : Nancy Carrasco, Ge Dai and Orlie Levy  
Serial No. : 09/995,007  
Filed : November 26, 2001  
Page 3

58. (New) The method of claim 56, wherein the nucleic acid from the mammalian tissue is mRNA made into cDNA.

59. (New) The method of claim 56, wherein the mammalian tissue is non-thyroid tissue.

60. (New) The method of claim 56, wherein the nucleic acid probe further comprises a label.

61. (New) The method of claim 60, wherein the label is selected from the group consisting of a radioactive label, biotin, and a fluorescent probe.

62. (New) The method of claim 56, wherein the tissue is a human tissue.

sub 63. (New) A method for detecting a mammalian sodium/iodide symporter in a sample, the method comprising contacting the sample with an antibody that is immunoreactive with the mammalian sodium/iodide symporter and determining whether the antibody bound to a mammalian sodium/iodide symporter.

64. (New) The method of claim 63, wherein the antibody is a polyclonal antibody.

65. (New) The method of claim 63, wherein the antibody is a monoclonal antibody.

66. (New) The method of claim 63, wherein the antibody is labeled.

67. (New) The method of claim 63, wherein the sample is a mammalian tissue.

Applicant : Nancy Carrasco, Ge Dai and Orlie Levy  
Serial No. : 09/995,007  
Filed : November 26, 2001  
Page 4

68. (New) The method of claim 67, wherein the mammalian tissue is thyroid tissue.

69. (New) The method of claim 67, wherein the mammalian tissue is non-thyroid tissue.

70. (New) The method of claim 67, wherein the mammalian tissue is human tissue.

42  
Correct  
71. (New) A method of identifying an iodide transport protein from non-thyroid tissue, the method comprising contacting nucleic acid from the non-thyroid tissue with a nucleic acid probe which can hybridize to a portion of the nucleotide sequence contained in Figure 2 (SEQ ID NO:1) and detecting hybridization thereof.

72. (New) The method of claim 71, wherein the nucleic acid from the non-thyroid tissue is mRNA.

73. (New) The method of claim 71, wherein the nucleic acid from the mammalian tissue is mRNA made into cDNA.

74. (New) The method of claim 71, wherein the nucleic acid probe further comprises a label.

75. (New) The method of claim 74, wherein the label is selected from the group consisting of a radioactive label, biotin, and a fluorescent molecule.